

STATEMENT OF THE CLAIMS

1. (withdrawn) In a lift truck, an improvement comprising:

two clamp members that translate relative to one another to grasp and lift material positioned therebetween, wherein one of said two clamp members has a central support bar integral thereto and laterally disposed between said two clamp members.

2. (withdrawn) A lift truck according to claim 1, wherein:

said central support bar is adapted to fit into a slot in a conveyor belt system to thereby facilitate positioning the two clamps members around material disposed therebetween and supported by the conveyor belt system.

3. (currently amended) A method of handling material comprising:

packaging material into elongate bags;

automatically arranging the elongate bags into groups, wherein at least one group has a cross-stacked configuration; and

automatically lifting and transporting said groups of elongate bags, group by group, to form a multi-row stack of elongate bags whose bottom row comprises a group having a cross-stacked configuration, said lifting and transporting applying opposed clamping forces to at least one group having a cross-stacked configuration while preventing elongate bags disposed side-by-side in said cross-stacked configuration from sliding past one another.

4. (original) A method according to claim 3, further comprising:
lifting and transporting the multi-row stack of elongate bags for transport to a customer.
5. (original) A method according to claim 3, wherein:
the material comprises loose-fill thermal insulation product.
6. (original) A method according to claim 5, wherein:
said loose-fill thermal insulation product comprises glass-fiber material.
7. (original) A method according to claim 5, wherein:
said loose-fill thermal insulation product comprises cellulose material.
8. (original) A method according to claim 5, wherein:
said elongate bags each have dimensions of about 38" by 21" by 8.5" and carry about 27 lbs. of product.
9. (original) A method according to claim 3, wherein:
said elongate bags comprise a polymer.
10. (original) A method according to claim 3, wherein:
wherein each group of elongate bags is transported by a conveyor assembly.

11. (original) A method according to claim 3, wherein:

said cross-stacked configuration comprises two bags disposed side-by-side along their lengths and one additional bag disposed orthogonal to and adjacent the two bags.

12. (currently amended) A method according to claim 3, wherein:

said automatic lifting and transporting said groups of elongate bags is carried out by a stacker machine having a moveable stacker head with fingers that apply opposed clamping forces to grip a given group of elongate bags and at least one support structure that is operably disposed between bags disposed side-by-side in said cross-stacked configuration to prevent such bags from sliding past one another.

13. (original) A method according to claim 12, wherein:

said support structure comprises at least one chain.

14. (currently amended) A method according to claim 12, wherein:

said support structure comprises one of wire strands and rope strands.

15. (currently amended) A method according to claim 4, wherein:

said lifting and transporting of said multi-row stack is carried out by a lift truck having two clamp members that translate relative to one another to apply opposed clamping forces for grasping and lifting ~~grasp and lift~~ a group of elongate bags positioned therebetween, ~~wherein one of said two clamp members has~~ and a central support bar

~~integral thereto and~~ laterally disposed between said two clamp members for preventing elongate bags disposed side-by-side in said cross-stacked configuration from sliding past one another.

16. (original) A method according to claim 15, wherein:

said central support bar fits into a slot in a conveyor belt system to facilitate positioning the two clamps members around a group of elongate bags.

17. (currently amended) A material handling system material comprising:

means for packaging material into elongate bags;

means for automatically arranging the elongate bags into groups, wherein at least one group has a cross-stacked configuration; and

means for automatically lifting and transporting said groups of elongate bags, group by group, to form a multi-row stack of elongate bags whose bottom row comprises a group having a cross-stacked configuration, including means for applying opposed clamping forces to at least one group having a cross-stacked configuration while preventing elongate bags disposed side-by-side in said cross-stacked configuration from sliding past one another.

18. (original) A material handling system according to claim 17, wherein:

the material comprises loose-fill thermal insulation product.

19. (original) A material handling system according to claim 18, wherein:

said loose-fill thermal insulation product comprises glass-fiber material.

20. (original) A material handling system according to claim 18, wherein:

said loose-fill thermal insulation product comprises cellulose material.

21. (original) A material handling system according to claim 18, wherein:

said elongate bags each have dimensions of about 38" by 21" by 8.5" and carry about 27 lbs. of product.

22. (original) A material handling system according to claim 17, wherein:

said elongate bags comprise a polymer.

23. (original) A material handling system according to claim 17, wherein:

wherein each group of elongate bags is transported by a conveyor assembly.

24. (original) A material handling system according to claim 17, wherein:

each group comprises two bags disposed side-by-side along their lengths and one additional bag disposed orthogonal to and adjacent the two bags.

25. (currently amended) A material handling system according to claim 17, wherein:

said means for automatically lifting and transporting said groups of elongate bags comprises a stacker machine having a moveable stacker head with fingers that apply opposing clamping forces to grip a given group of elongate bags and at least one support

structure that is operably disposed between bags disposed side-by-side in said cross-stacked configuration to prevent such bags from sliding past one another.

26. (original) A material handling system according to claim 25, wherein:

said support structure comprises at least one chain.

27. (currently amended) A material handling system according to claim 25, wherein:

said support structure comprises one of wire strands and rope strands.

28. (currently amended) A material handling system according to claim 17, wherein
~~further comprising:~~

said means for automatically lifting and transporting said groups of elongate bags
comprises a lift truck having two clamp members that translate relative to one another to
apply opposed clamping forces for grasping and lifting ~~grasp and lift~~ a group of elongate
bags positioned therebetween, ~~wherein one of said two clamp members has~~ and a central
support bar ~~integral thereto and~~ laterally disposed between said two clamp members for
preventing elongate bags disposed side-by-side in said cross-stacked configuration from
sliding past one another.

29. (original) A material handling system according to claim 28, further comprising:

a conveyor belt system having a slot adapted to receive said central support bar to
thereby facilitate positioning the two clamps members around a group of elongate bags
supported by said conveyor belt system.

30. (new) An apparatus for handling a group of elongate bags that are arranged in a cross-stacked configuration, the apparatus comprising:

means for automatically lifting and transporting said particular group of elongate bags by applying opposed clamping forces to the particular group of elongate bags while preventing elongate bags disposed side-by-side in said cross-stacked configuration from sliding past one another.

31. (new) An apparatus according to claim 30, wherein:

said cross-stacked configuration comprises two bags disposed side-by-side along their lengths and one additional bag disposed orthogonal to and adjacent the two bags.

32. (new) An apparatus according to claim 30, wherein:

said means for automatically lifting and transporting said particular group of elongate bags comprises a stacker machine having a moveable stacker head with fingers that apply opposing clamping forces to grip said particular group of elongate bags and at least one support structure that is operably disposed between bags disposed side-by-side in said cross-stacked configuration to prevent such bags from sliding past one another.

33. (new) An apparatus according to claim 32, wherein:

said support structure comprises at least one chain.

34. (new) An apparatus according to claim 32, wherein:

said support structure comprises one of wire strands and rope strands.

35. (new) An apparatus according to claim 30, wherein:

said means for automatically lifting and transporting said particular group of elongate bags comprises a lift truck having two clamp members that translate relative to one another to apply opposed clamping forces for grasping and lifting said particular group of elongate bags positioned therebetween, and a central support bar laterally disposed between said two clamp members for preventing elongate bags disposed side-by-side in said cross-stacked configuration from sliding past one another.